



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,449	07/01/2003	Tong Zhang	100202720-1	1631
22879	7590	12/08/2006	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				SWERDLOW, DANIEL
ART UNIT		PAPER NUMBER		
		2615		

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/611,449	ZHANG ET AL.	
	Examiner	Art Unit	
	Daniel Swerdlow	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-38 is/are pending in the application.
 - 4a) Of the above claim(s) 18-38 is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1,2,5-12,16 and 17 is/are rejected.
- 7) Claim(s) 3,4 and 13-15 is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: ____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>07/01/2003</u> .	6) <input type="checkbox"/> Other: ____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (Claims 1-17) in the reply filed on 26 September 2006 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 5 through 12, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh (US Patent 5,408,449) in view of Takenaka et al. (US Patent 6,807,450).

4. Regarding Claim 1, Oh discloses a digital audio player with an intro-play function comprising: sequentially reproducing (i.e., rendering) foreparts (i.e., audio summaries) that quickly reveal the contents of (i.e., comprise digital content summarizing) music items (i.e., a respective associated audio piece) (Fig. 6, steps S3-S8; column 6, lines 1-24). Therefore, Oh anticipates all elements of Claim 1 except that Oh is silent as to any transitional audio. Takenaka discloses a digital audio reproduction method (Fig. 5E; column 12, lines 11-29) that provides transition audio segments between the information pieces (i.e., music items). Takenaka further discloses that such an arrangement provides a natural linkage between songs, enhancing listener enjoyment (column 12, lines 42-45). It would have been obvious to one skilled in the art at the

time of the invention to apply the transition segments taught by Takenaka to the intro-play function taught by Oh for the purpose of realizing the aforesaid advantages.

5. Regarding Claim 2, Takenaka further discloses identical transitions (Fig. 5E; Fig 6).
6. Regarding Claim 5, Takenaka further discloses consecutive reproduction (i.e., rendering of audio data and transitions (Fig. 5E; column 12, lines 11-29).
7. Regarding Claim 6, Oh further discloses the foreparts (i.e., audio summaries) that quickly reveal the contents of (i.e., comprise digital content summarizing) music items (i.e., a respective associated audio piece) are the first 10 seconds (i.e., a representative segment) (Fig. 6, steps S3-S8; column 6, lines 1-24).
8. Regarding Claims 7 and 8, Oh further discloses selectively storing item numbers of music items (i.e., classifying audio pieces) in response to user input during the reproduction (i.e., rendering of the forepart (i.e., summary) (Fig. 6, steps S4, S5; column 5, lines 61-65) and reproducing those music items (i.e., building a playlist) (Fig. 6, step S10; column 6, lines 21-24).
9. Regarding Claim 9, Oh further discloses associating item number of a music item (i.e., audio piece) with the forepart (i.e., summary). As such the forepart (i.e., summary) is linked to the music item (i.e., audio piece).
10. Regarding Claim 10, Oh further discloses reproducing those music items associated with selected summaries (Fig. 6, step S10; column 6, lines 21-24).
11. Regarding Claims 11 and 12, Oh further discloses reproducing (i.e., rendering) entire music items based on selection of intro clips that reproduce the beginnings of the items (Fig. 6, steps S4, S5; column 5, lines 61-65). As such, Oh discloses rendering audio pieces beginning at

a location (i.e., the beginning) linked to an audio summary (that also represents the beginning of the piece).

12. Regarding Claim 16, Takenaka further discloses reproduction at a constant level (i.e., normalizing to a common loudness level) (Fig 5E; column 12, lines 30-36).

13. Claim 17 is essentially similar to Claim 1 and is rejected on the same grounds.

Allowable Subject Matter

14. Claims 3, 4 and 13 through 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Regarding Claim 3, as shown above apropos of Claim 2, the combination of Oh and Takenaka makes obvious all elements except the transition segment corresponding to a Gabor function in a time domain representation. Takenaka discloses a “fade-down fade-up” transition segment. US 2003/0037664 A1 to Comair et al. discloses audio transitions involving key or rhythm changes (Fig. 6; para. 0083). US 2002/0120752 A1 to Logan et al. discloses audio transitions involving silence, tone, static or stored audio clips (paras. 0028-0029). However, the prior art does not disclose or suggest a transition segment corresponding to a Gabor function in a time domain representation, as claimed. Therefore, Claim 3 is allowable matter.

16. Claim 4 is allowable matter due to dependence from Claim 3.

17. Regarding Claim 13, Oh discloses reproducing music items in recorded order (column 6, lines 21-24). US Patent 6,128,255 to Yankowski discloses reproducing audio selections in a user-specified order (column 9, lines 63-64). US Patent 4,792,934 to Masaki discloses

reproducing audio selections in a random order (column 1, lines 25-28). However, the prior art does not disclose or suggest reproducing music items in a sequence based on similarity to a given audio summary, as claimed. Therefore, Claim 13 is allowable matter.

18. Claim 14 is allowable matter due to dependence from Claim 13.

19. Regarding Claim 15, Oh discloses audio summaries using an initial portion of a music item. US Patent 5,105,401 to Aoyagi et al. discloses using a high-speed audio summary (column 3, lines 58-67). US Patent 5,126,987 to Shiba et al. discloses using an intermediate portion of a music item as an audio summary (column 1, lines 56-65). However, the prior art does not disclose or suggest responding to a user input during rendering of an audio summary for a given audio piece by rendering a different audio summary for the given audio piece, as claimed.

Therefore, Claim 15 is allowable matter.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 571-272-7531. The examiner can normally be reached on Monday through Friday between 7:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Daniel Swerdlow
Primary Examiner
Art Unit 2615

ds
1 December 2006